

**OPERATION MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI**

**CASIO DS-10E/DS-20E**

**MANUAL DE OPERACION  
MANUALE D'ISTRUZIONI**

FTZ



Printed in Taiwan  
Imprimé à Taiwan

**English**

To ensure its longevity, do not touch the inside of the calculator, avoid hard knocks and unduly strong key pressing. Extreme cold (below 32°F or 0°C), heat (above 104°F or 40°C) and humidity may also affect the functions of the calculator. Never use volatile fluid such as lacquer thinner, benzine, etc. when cleaning the unit. For servicing contact the original store or nearby dealer.

**1/GENERAL GUIDE**

**[ON] ON key:**

See Section 2 (SOLAR BATTERY).

**[=] Equal/automatic accumulation key:**

**[GT] Grand total key:**

**[M+] (M-) Memory plus (minus) key:**

**[MR] Memory recall key:**

**[MC] Memory clear key:**

**[SQR] Square root key:**

**[%] Percent key:**

**[RS] Right shift key:**

**[SIGN] Sign change key:**

**[C] Clear key:**

**[AC] All clear key:**

**[F/C] Decimal mode selector:**

At the "F" position, the decimal floats and the underflow system works to protect the significant digits.

At the "CUT" position, an answer is automatically cut off at the decimal place indicated by the decimal place selector mentioned below, applying floating mode for entry and intermediate result.

At the "UP" position, an answer is automatically rounded up in the same way as above.

At the "5/4" position, an answer is rounded off in the same way as above.

**[ADD] Decimal place selector:**

Prefixes the decimal place at 0, 2, 3 or 4.

At "ADD<sub>2</sub>" position, numbers with decimal places can be entered without pressing the [.] key in addition/subtraction and the decimal point is automatically displayed at 2 position. If the [.] key is pressed, it displays the decimal point in its logical position.

Note that ADD mode calculations can not be performed with the decimal mode selector at "F" position.

**2/SOLAR BATTERY**

\* Since this unit operates on the amorphous silicon solar battery, there is no power switch. Power will be cut off when the unit is no longer exposed to light.

\* The solar battery converts light into electrical energy. When there is insufficient light or when the light source is temporarily blocked, the display may blank out or show irregular figures. Also, the pressed key may not work. If this happens, place the unit where there is sufficient light, press the [ON] key and re-start your calculation. When the [ON] key is pressed, the display may show irregular figures but it will not affect the calculating function.

\* This unit will operate under sunlight, fluorescent light or incandescent light. The battery's capacity for converting the light to electrical energy will vary according to the light source. This unit should be used in light of 50 lux or more.

Refer to chart below.

Lighting	Note
	Outdoors, near a window or in an office Use in lighting that will not tire the eyes when reading or doing office work for extended periods of time.
	Fluorescent lighting for Place the unit approximately 1.5m (5ft) below a 15W fluorescent lamp with sufficient brightness for reading a newspaper.
	Incandescent lighting Place the unit approximately 2.5m below a 100W incandescent lamp. (Effectiveness will vary with the size or color of the lampshade.)

**3/OVERFLOW**

Overflow is indicated by the "E" sign and stops further calculation.

**Overflow occurs:**

a) When the integer part of an answer, whether intermediate

b) When the integer part of an answer, whether intermediate

## 1/GENERAL GUIDE

### **[ON] ON key:**

See Section 2 (SOLAR BATTERY).

### **[EQ] Equal/automatic accumulation key:**

### **[GT] Grand total key:**

### **[MR] Memory plus (minus) key:**

### **[MR] Memory recall key:**

### **[MC] Memory clear key:**

### **[SR] Square root key:**

### **[PCT] Percent key:**

### **[RS] Right shift key:**

### **[SGN] Sign change key:**

### **[CL] Clear key:**

### **[AC] All clear key:**

### **[DEC] Decimal mode selector:**

At the "F" position, the decimal floats and the underflow system works to protect the significant digits.

At the "CUT" position, an answer is automatically cut off at the decimal place indicated by the decimal place selector mentioned below, applying floating mode for entry and intermediate result.

At the "UP" position, an answer is automatically rounded up in the same way as above.

At the "5/4" position, an answer is rounded off in the same way as above.

### **[DPS] Decimal place selector:**

Prefixes the decimal place at 0, 2, 3 or 4.

At "ADD<sub>2</sub>" position, numbers with decimal places can be entered without pressing the [.] key in addition/subtraction and the decimal point is automatically displayed at 2 position. If the [.] key is pressed, it displays the decimal point in its logical position.

Note that ADD mode calculations can not be performed with the decimal mode selector at "F" position.

## 2/SOLAR BATTERY

\* Since this unit operates on the amorphous silicon solar battery, there is no power switch. Power will be cut off when the unit is no longer exposed to light.

\* The solar battery converts light into electrical energy. When there is insufficient light or when the light source is temporarily blocked, the display may blank out or show irregular figures. Also, the pressed key may not work. If this happens, place the unit where there is sufficient light, press the [ON] key and re-start your calculation. When the [ON] key is pressed, the display may show irregular figures but it will not affect the calculating function.

\* This unit will operate under sunlight, fluorescent light or incandescent light. The battery's capacity for converting the light to electrical energy will vary according to the light source. This unit should be used in light of 50 lux or more.

Refer to chart below.

Lighting	Note
	Use in lighting that will not tire the eyes when reading or doing office work for extended periods of time.
	Place the unit approximately 1.5m (5ft) below a 15W fluorescent lamp with sufficient brightness for reading a newspaper.
	Place the unit approximately 2.5m (8ft) below a 100W incandescent lamp. (Effectiveness will vary with the shape or color of the lampshade.)

## 3/OVERFLOW

Overflow is indicated by the "E" sign and stops further calculation.

### **Overflow occurs:**

- When the integer part of an answer, whether intermediate or final, exceeds 12 digits (DS-10E: 10 digits). However, the significant 12 (10) digits of the answer are given and the decimal point indicates that the true decimal position is 12 (10) digits to the right.
- When the integer part of an accumulated total in the GT or independent memory exceeds 12 (10) digits.
- When a negative number is extracted. However, the answer is given as an absolute value.

To release the overflow check, press the [AC] or [CL] key.

[AC] clears the entire machine except the independent memory.

[CL] clears only the "E" sign and the displayed approximate number can be utilized in subsequent calculations.

### **Memory protection:**

The contents of the memory are protected against overflow and the total accumulated so far is recalled by the [MR] (or [GT]) key after the overflow check is released by the [CL] key.

## 4/SPECIFICATIONS

### **Abilities:**

Four basic calculations, constants for +/−/×/÷, memory calculations, percentage calculations including add-ons/discounts and mark-ups/mark-downs, square roots, sign change and various kinds of practical calculations.